

**CALIFORNIA WILDLIFE HABITAT RELATIONSHIPS SYSTEM**  
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B271 Great Gray Owl *Strix nebulosa*  
Family: Strigidae Order: Strigiformes Class: Aves

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#### DISTRIBUTION, ABUNDANCE, AND SEASONALITY

A rarely seen resident at 1400 to 2300 m (4500-7500 ft) in the Sierra Nevada from the vicinity of Quincy, Plumas Co. south to the Yosemite region. Most recent records are from the Merced and Tuolumne River drainages of Yosemite National Park. Occasionally reported in northwestern California in winter, and in Warner Mts. in summer (McCaskie et al. 1988). Breeds in old-growth red fir, mixed conifer, or lodgepole pine habitats, always in the vicinity of wet meadows. Recent studies suggest a population decline; there may be fewer than 50 pairs remaining in California (Grinnell and Miller 1944, Winter 1980, 1982).

#### SPECIFIC HABITAT REQUIREMENTS

**Feeding:** Stoops on meadow-dwelling rodents, especially pocket gophers and voles, from low, exposed perches in or on edge of meadows. Eats a few birds, up to grouse size.

**Cover:** Uses trees in dense forest stands for roosting cover. Small trees and snags in, or on edge of, meadows used for hunting perches.

**Reproduction:** Nests in large, broken-topped snags, usually greater than 60 cm (24 in) dbh; builds no nest (Winter 1980). The 6 nests located in California have been within 262 m (861 ft) of a meadow (Winter 1980, 1982). Nest height ranged from 7.6 to 21.9 m (25-72 ft) above the ground. In other parts of range, often uses old hawk or eagle nests.

**Water:** No additional data found.

**Pattern:** Forages in wet meadows and nests and roosts in nearby dense coniferous forest. Both old-growth and second-growth forest used if suitable nest-sites are available (Winter 1982).

#### SPECIES LIFE HISTORY

**Activity Patterns:** Yearlong, circadian activity; considerable daytime activity.

**Seasonal Movements/Migration:** Most individuals apparently are resident, but there are few winter records. Some nonbreeders, postbreeders, and juveniles wander above breeding range to 2900 m (9000 ft) (Gaines 1977b). May be nomadic, following prey populations.

**Home Range:** Home range and territory probably same. In California, Winter (1982) estimated home range at 239-258 ha (591 -638 ac). In Wyoming, Craighead and Craighead (1956) reported that home range varied from 256-400 ha (632-988 ac).

**Territory:** Most of home range probably defended. In Quebec, Brenton and Pittaway

(1971) reported a mean territory size of 45 ha (112 ac).

Reproduction: Peak of egg-laying probably March through May. Monogamous. One clutch per yr averages 3 eggs (range 1-5). Incubation about 30 days, by female. Male feeds female and semialtricial young at nest. Fledging age is 21-28 days, or more (Pulliainen and Loisa 1977).

Niche: Largest North American owl. California Endangered; apparently the rarest owl in California. Should be searched for in suitable habitat in northern California.

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